H. St. John.

Rhodora

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THE NEW ENGLAND BOTANICAL CLUB

Vol. 32. June, 1930. No. 378.

A FEW NOTEWORTHY PLANTS FROM FALMOUTH, MASSACHUSETTS

JOHN M. FOGG, JR.

FROM 1923 to 1928, inclusive, the writer spent all or a part of each summer at the Marine Biological Laboratory at Woods Hole, Barnstable County, Massachusetts. During these six years, considerable attention was paid to the vascular flora of the region and many collecting trips were made not only to the adjacent islands but to various localities in Falmouth, Mashpee, Sandwich, and Bourne.

As invariably happens when such a study is made (and this is apparently as true of a carefully worked region as of one which has been little visited by botanists), new stations have been discovered for several interesting species and significant extensions in ranges have been made for others. A few of these observations are here recorded with the hope that they may contribute toward a clearer understanding of the problems of plant distribution as exhibited in southeastern New England.

The western portion of Cape Cod, which includes the four townships mentioned above, is found to differ botanically as well as geologically and topographically from the rest of Barnstable County. This "Upper Cape," as it is often referred to, is made up of a line of morainal hills which extends, in a general north and south direction, from Woods Hole to the Cape Cod Canal. These hills are, for the most part, heavily wooded and present an appearance which is in rather marked contrast to the low, sandy, treeless reaches of that portion of Cape Cod lying to the east. That this Upper Cape supports a flora which likewise differs from that of the areas eastward is borne out by a detailed examination of the characteristic herbaceous plants

of the region, as well as by the superficial aspect of the trees and shrubs. The prevailing tone of the flora of the central portion of Cape Cod is that of the southern coastal plain (a fact clearly established by the discerning work of Professor M. L. Fernald) whereas the geographic relations of most of the plants from the region under present consideration are rather with a widely distributed continental flora. The various factors underlying this differential distribution have been made the subject of investigation by the writer and the conclusions to which a study of the glacial history of the area have led him are summarized in a report which awaits immediate publication in Rhodora.

The continental affinities of the flora of the Upper Cape have been long suspected by Fernald and are demonstrated by his own field observations as well as those of his associates. Dr. H. K. Svenson, for example, has noted the occurrence in Sandwich of such species as *Polypodium virginianum*, *Polystichum acrostichoides*, *Thelypteris Phegopteris*, *Lycopodium clavatum* and *L. lucidulum*.[1] In the same paper *Najas guadalupensis* and *Aster nemoralis* are reported from Falmouth. These are all plants which are rare or absent elsewhere in Barnstable County and which are more representative of the richer soils of the mainland proper. Many of the finds herein recorded are of a similar nature and merit interest mainly as further illustrations of the relationship just indicated.

The following records are substantiated by specimens collected by the writer and deposited either in the herbarium of the New England Botanical Club, Cambridge, Mass., or at the University of Pennsylvania, Philadelphia, Pa. Duplicates of a few have been distributed to the Missouri Botanical Garden, St. Louis, Mo., the herbarium of Cornell University, Ithaca, N. Y., or the Marine Biological Laboratory, Woods Hole, Mass.

ALISMA PLANTAGO-AQUATICA L., var. PARVIFLORUM (Pursh) Farwell. See Rept. Comm. Parks & Boulev., Detroit, xi. 44 (1900). This is apparently a rare plant in southeastern Massachusetts. Material in the herbarium of the New England Botanical Club shows it from New Bedford, Bristol County, where it was collected by E. W. Hervey, but it appears to be unknown elsewhere in this part of the state. In 1924 the writer came upon the plant growing in a springy hollow in the woods east of the Eel Pond at Woods Hole.

[1] Svenson. RHODORA, XXX. 135 (1928).

This material had small fruiting heads (3–4 mm. in diam.) and small achenes (less than 2 mm. long) and seems best referred to the variety *parviflorum* as at present understood.

Elodea occidentalis (Pursh) St. John. See Rhodora, xxii. 17 (1920). This is not a common plant on Cape Cod, having been collected previously only from Harwich and Brewster. It is abundant in Fresh Pond, Falmouth, where it has been observed in late summer piled up in windrows along the cobbly border of the pond.

Panicum latifolium L. A species characteristic of the somewhat better soils of the central and western portions of the state and here for the first time reported from Barnstable County. Specimens in the Gray Herbarium and New England Botanical Club show it to be occasional in Plymouth and Bristol Counties but it seems not to have been found before on Cape Cod. It was collected by Professor Fernald and the writer in the rocky woods west of Falmouth, a region which harbors several other of these representatives of a more continental flora.

Glyceria acutiflora Torr. This grass seems never before to have been reported from Barnstable County. It has been collected on Nantucket and Martha's Vineyard and the writer has long been familiar with it on the Elizabeth Islands where it is abundant in many of the small pond holes. It is now recorded from Falmouth, where it is known to occur in several boggy hollows west of the railroad station.

G. grandis Wats. Another grass which enjoys, in general, a more northerly distribution. It has been collected at Brewster and is also known on the basis of a specimen of A. H. Moore's from Woods Hole. The present station is a moist grassy hollow in the woods north of Woods Hole, where this grass and *Carex tribuloides* form an almost solid growth.

Cyperus ferax Rich. Not a common sedge in this portion of the state. It seems to prefer brackish meadows and, although such situations abound in Barnstable County, this species appears to have been collected at only one locality. Some years ago Professor Fernald discovered it growing along the brackish shores north of Gunning Point, Falmouth, and on August 9, 1927, he and the writer visited the same station and again found the plant, in company with *Hierochloë odorata*, var. *fragrans*, *Rumex maritimus*, var. *fueginus* and *Galium trifidum*.

Scirpus debilis Pursh. This species is fairly common in eastern Massachusetts, where it is known from many stations in Middlesex and Norfolk Counties. Its only recorded occurrence in the extreme southeastern portion, however, seems to have been from Martha's Vineyard where we know it from Tisbury on the basis of collections made by Cushman and by Seymour. It is here reported from Weeks Pond in Falmouth, at present its sole locality in Barnstable County.

Carex tribuloides Wahlenb. Collected in a wet, grassy hollow north of Woods Hole, with *Glyceria grandis*, as noted above. This is another sedge of the better soils inland and therefore rare or lacking on the sands and gravels of southeastern Massachusetts. In the New England Botanical Club there is a specimen of Hervey's collecting from New Bedford, but otherwise the plant is unknown in the state south of Norfolk County.

Spirodela polyrhiza (L.) Schleid. The only record of this species from the southeastern part of the state in either the Gray Herbarium or the New England Botanical Club is a collection made at Lakeville, Plymouth County. However, in the herbarium of the Boston Society of Natural History there is a sheet collected by Cushman in 1912 labelled merely "Falmouth." The plant has long been known to the writer as growing rather abundantly in Oyster Pond, which lies about halfway between Woods Hole and Falmouth. There is evidence that this pond suffers occasional inundations from the waters of Vineyard Sound, an observation which is borne out by the occurrence around its shores of tangled filaments of the green alga *Enteromorpha* as well as the presence of *Potamogeton bupleuroides*, a frequent indicator of brackish conditions.

Juncus balticus Willd., var. littoralis Engelm. This interesting rush, which ranges from Labrador and Newfoundland south to Lancaster County, Pennsylvania, and westward across the continent to the Rocky Mountains, is known in Massachusetts only from the eastern portion of the state. On Cape Cod it has been collected only at Provincetown, Barnstable and Sandwich and it therefore seems permissible to report it from a fourth station in Barnstable County. The plant forms an almost solid growth around the north side of a small pond west of Oyster Pond, associated with *Scirpus Olneyi*.

J. brevicaudatus (Engelm.) Fernald. A species which is far from common in southeastern Massachusetts. Its only other station in Barnstable County seems to be at Brewster. We now know it

from a quagmire bog east of Long Pond, Falmouth, where it was collected by the writer in mature fruiting condition on August 21, 1928.

Rumex maritimus L., var. fueginus (Phil.) Dusén. See St. John, Rhodora, xvii. 73 (1915). This species has been collected on Nantucket, Martha's Vineyard and the Elizabeth Islands, but the only indication of its occurrence in Barnstable County has been a specimen in the herbarium at Yale University collected by W. G. Farlow and labelled "Falmouth." As already noted, Professor Fernald and the writer came upon the plant in brackish marshes north of Gunning Point, Falmouth.

Ceratophyllum demersum L. A search through the material in the Gray Herbarium fails to show this plant from southeastern Massachusetts, but in the collections of the New England Botanical Club there are specimens from New Bedford, Chatham and Eastham. In Oyster Pond (the same locality from which *Spirodela* is noted above) this species has for several consecutive seasons been observed by the writer. Contrary to the usual custom of the species, the Oyster Pond material has occasionally been found in a fruiting condition.

Anemone virginiana L. This plant is of only occasional occurrence in southeastern Massachusetts, enjoying rather an Alleghenian distribution. Material in the Gray Herbarium and the New England Botanical Club demonstrates its presence at Barnstable and Centreville and in the collections of the Boston Society of Natural History there are two sheets from Woods Hole. It was discovered by Professor Fernald and the writer growing in the sandy woods near Gunning Point, Falmouth.

Thalictrum revolutum DC. Like the preceding, this species belongs rather to the upland wooded areas than to the lighter soils of the Cape Cod region. It has previously been collected at Sandwich and Centreville and is now reported from Falmouth, where it has been found at several localities in the rocky woods north of Woods Hole.

Akebia quinata Dcne. An ornamental climber, belonging to the Lardizabalaceae, which occurs occasionally as an escape. The only other New England record for this plant, as shown by material in the Gray Herbarium, is from Sandwich, where it was collected by Professor Fernald in 1922. It has been known to the writer since 1923,

when it was first discovered trailing over the stonework of a bridge along the railroad a short distance northeast of Woods Hole.

ADLUMIA FUNGOSA (L.) Greene. Sparingly escaped from cultivation in New England and here reported, apparently for the first time from southeastern Massachusetts, from an open field northeast of the village of Falmouth.

RADICULA SYLVESTRIS (L.) Druce. Records for this plant from Cape Cod seem to be totally lacking. In fact, the writer has seen no material to indicate that it occurs in Massachusetts southeast of Norfolk County. It is here reported from Woods Hole, where it was found growing along a road running through the oak woods north of the Laboratory.

RUBUS ALLEGHENIENSIS Porter. Although this species has twice been collected on Martha's Vineyard, there have been no previous records to account for its occurrence elsewhere southeast of Plymouth and Bristol Counties. It is another of those plants the geographical relations of which are much more with a continental than a coastal plain flora, and yet which recent researches have shown to belong to the vegetation of the western portion of the Cape. It occurs in the sandy woods north of Woods Hole and west of Falmouth.

BAPTISIA BRACTEATA (Muhl.) Ell. The discovery of this interesting plant in the Falmouth region was first reported by Dr. W. R. Taylor in 1921.[1] It was found growing in the dry, sandy soil along the railroad about one mile northeast of Woods Hole in company with *B. tinctoria* and many other species of the dry pine and oak woods. That its occurrence here is due to the proximity of the railroad seems obvious, for the species is a southern and western one, the present locality constituting its only known station north of South Carolina or east of Indiana. The colony, a small one when first reported, appears to have increased in size during recent years and, if not further molested by those who seek to transplant this attractive species to their own gardens, seems destined to persist.

CELASTRUS SCANDENS L. The Climbing Bittersweet is certainly not a common plant in southeastern Massachusetts. It was collected by Professor Fernald from Falmouth in 1919 and has twice been found at Chilmark, Martha's Vineyard. These stations, with the addition of that here reported, appear to represent the known distribution of this species in the state south of Norfolk County. The

[1] Rhodora, xxii. 255 (1921).

present locality is a deep hollow in the woods just north of Woods Hole, where the plant forms a dense tangle over the vegetation bordering a small pond.

Malva Alcea L. This handsome species, which occurs occasionally as an escape from cultivation, is well established along the upper border of the beach near the lighthouse at Nobska Point, east of Woods Hole.

Lythrum Salicaria L. The Spiked Loosestrife has been collected from half a dozen localities in Massachusetts, most of them in the central and western portions of the state. It is here recorded from Falmouth, where it has become established along the grassy eastern border of Salt Pond.

Coelopleurum lucidum (L.) Fernald. *C. actaeifolium* of Gray's Manual. See Rhodora, xxi. 146 (1919). This essentially northern species has been known in southeastern Massachusetts from two localities, to which may now be added a third and a fourth. The plant was reported[1] in 1840 from Scituate, Plymouth County, and Fernald and Weatherby found it at Falmouth. To the writer it has long been known as growing rather abundantly along the exposed gravelly shores north of Woods Hole, a section known locally as Ganset. It has also been collected from Cuttyhunk, one of the Elizabeth Islands (Dukes County).

Thymus Serpyllum L. Creeping Thyme has been introduced on the golf course at Woods Hole and has become established on nearby roadside banks. This appears to be the first record of the plant from Barnstable County.

Penstemon laevigatus Ait., var. digitalis (Sweet) Gray. This species, here reported for the first time from southeastern Massachusetts, was collected along the railroad northeast of Woods Hole, growing not far from the *Baptisia bracteata*. Like the *Baptisia*, it presumably owes its occurrence there to the presence of the railroad.

Viburnum acerifolium L. This is another of those plants characteristic of the better soils inland and only sparingly, if at all, represented on Cape Cod. It is known from the Sandwich and Falmouth regions, being of fairly frequent occurrence in the woods around Woods Hole.

Sicyos angulatus L. There is no material in either the Gray Herbarium or the collection of the New England Botanical Club to

[1] Bigelow, Fl. Bost. ed. 3: 118 (1840).

indicate that the One-seeded Bur Cucumber has ever been found growing in Barnstable County. This may, however, be merely another case of a common plant consistently neglected by collectors. The species grows profusely in a wet thicket north of the Mill Pond at Woods Hole.

HIERACIUM PILOSELLA L. This little Hawkweed, which is such an obnoxious pest in certain regions northward, is fortunately of only casual occurrence in Massachusetts. In Barnstable County it has been collected previously only at Centreville. The present station is a grassy bank along the roadside near Oyster Pond, about two miles northeast of Woods Hole. Observations covering a period of five years show that the plant is not spreading and lead to the conclusion that it is here unlikely to become a dangerous weed.

UNIVERSITY OF PENNSYLVANIA.

A NEW LESQUERELLA FROM WESTERN TEXAS.—LESQUERELLA **lepidota**, sp. nov. Perennial or biennial from a rather slender, woody root; stems slender, clustered, ascending, 4–10 cm. high, sparsely leafy, densely lepidote-stellate; basal leaves oblanceolate, obtuse, up to 7 cm. long and 13 mm. wide, long-petioled, entire or frequently repand, lepidote-stellate on both surfaces; cauline leaves up to 2 cm. long and 5 mm. wide, entire, obtuse, narrowed into a slender petiole, lepidote-stellate on both surfaces; racemes up to 3 cm. long, many-flowered, dense; pedicels about 10 mm. long, ascending, stout; petals bright yellow, obovate, clawed, 6 or 7 mm. long; sepals oblong, 4 mm. long, densely lepidote-stellate; capsules longer than broad, 6 or 7 mm. long and 5 mm. broad, rounded at the summit, lepidote-stellate, shortly stipitate; style much shorter than the capsule, slender, up to 3 mm. long; seeds 5–12 in each capsule, flattened, orbicular, about 1.5 mm. in diameter.

Collections were made May 28, 1928, in the Sierra Diablo on a ridge just above Victoria Canyon at about twenty miles north of Allamore, Hudspeth County, TEXAS. The TYPE specimen, No. 1588, is deposited in the herbarium of the Texas Agricultural College at College Station, Texas. Co-type specimen, No. 1587, is deposited in the Gray Herbarium.

This species differs from *L. montana* (Gray) Watson in having the capsule rounded at the apex and likewise in having the cauline leaves rounded at the apex. It differs from both *L. lata* Wooton & Standley and *L. rectipes* Wooton & Standley in having a much longer capsule and a style not surpassing the capsule. This species is clearly distinct.—V. L. CORY, *Grazing Research Botanist*, TEXAS AGRICULTURAL EXPERIMENT STATION.

A NEW SPECIES OF SALIX FROM THE MACKENZIE BASIN[1]

Hugh M. Raup

(Plate 202)

While botanizing in the upland country west of the Slave River during the summer of 1929, the writer turned up a strange willow. The material was collected rather late in the season, when nearly all the capsules had opened. It grows in a marshy bog, with a thick turf of grasses, sedges, and such other willows as *S. candida* Flügge. Its nearest relative seems to be *S. pedicellaris* Pursh, from which it differs chiefly in its pubescent capsules and twigs, and in its shorter pedicels. It is clearly different, also, from an eastern segregate from *S. pedicellaris*, *S. hebecarpa* Fernald, having narrower, more acute, and more pubescent leaves with non-reticulate venation, hairy branches, and an upright habit. *S. hebecarpa* has pubescent capsules as a variable character.

Salix **athabascensis**, nov. sp. (tab. 202). Frutex 3–6 dm. altus; ramuli novelli subtiliter cinereo-pilosi; folia obovata vel elliptica, 10–30 mm. longa, 5–15 mm. lata, integerrima vel minute glanduloso-denticulata, apice acuta vel acuminata, superne tenuiter sericeo-pubescentia, adulta praeter costam glabrescentia, subtus tenuiter adpresse pilosa vel adulta glabrescentia; petioli 2.5–6 mm. longi, plerumque 3–4 mm. Amenta feminea 1.5–2 cm. longa, pedunculo foliato 1–1.5 cm. longo suffulta; bracteae fulvae adultae, 1–1.3 mm. longae, obtusae vel rotundatae, sericeo-villosae; capsula 5–6 mm. longa, breviter adpresso-villosa, pedicello 1–1.5 mm. longo suffulta; glandula 0.3–0.4 mm. longa, truncata; styli 0.3 mm. longi, stigmatibus bifidis.

Shrub 3–6 dm. high; young branches finely gray-hairy; leaves obovate or elliptical, 10–30 mm. long, 5–15 mm. wide, entire or minutely glandular-dentate, acute or acuminate, the upper surfaces thinly silky-pubescent, becoming glabrous except on the midvein, the lower surfaces thinly appressed hairy or the adult becoming glabrous; petioles 2.5–6 mm. long, mostly 3–4 mm. Female aments 1.5–2 cm. long, born on leafy peduncles 1–1.5 cm. long; scales brown in the mature material, 1–1.3 mm. long, obtuse or rounded, silky-villous; capsules 5–6 mm. long, covered with short appressed hairs; pedicels 1–1.5 mm. long; gland 0.3–0.4 mm. long, truncate; style 0.3 mm. long, with a divided stigma.—Muskeg about 1 mile north of the ranger cabin at Moose Lake, lat. 59° 40′, Alberta, August 17, 1929. *H.*

[1] Published by permission of the Director, National Museum of Canada.

M. Raup. Nos. 8120, 8122, 8125–26, 8128–29. The type, No. 8129, will be found in the herbarium of the National Museum of Canada.

Gray Herbarium,
Harvard University.

Explanation of Plate 202.

Salix athabascensis. Branches at right × ½; branch at left × 1¾.

A NEW WILLOW FROM THE CÔTE NORD, QUEBEC

M. L. Fernald

(Plate 203)

Salix **simulans,** n. sp., frutex 4.5 dm. altus erectus; ramulis novellis sparse pilosis glabratisve deinde castaneis nitidulis; gemmis bene evolutis ovoideis olivaceo-castaneis nitidis sparse pilosis; foliis maturis oblongis vel anguste oblongo-obovatis 1–3.3 cm. longis 0.4–1.4 cm. latis subcoriaceis glabris vel glabratis (junioribus sparse pilosis) obtusis vel subacutis basi obtusis vel angustatis petiolatis, petiolis gracilibus 3–8 mm. longis, margine integris vel subintegris vel obsolete dentatis revolutis, supra viridibus subtus glaucescentibus elevato-venosisque venis lateralibus basi breviter decurrentibus; amentis foemineis maturis coetaneis pedunculatis 1.5–2 cm. longis 6–8 mm. crassis densifloris vel basi laxifloris; pedunculis 1.5–2 cm. longis foliis 4–6 munitis, pedunculo rhachique griseo-pilosis; bracteis late oblongis 2–2.5 mm. longis basi longe pilosis apice fulvescente rotundato vel emarginato glabrescentibus; capsulis lanceolato-ovoideis apice obtusis 2.5–4 mm. longis densissime albido-tomentosis; stylis distinctis 0.3–0.5 mm. longis valde bifidis, stigmatibus apice valde bipartitis; pedicellis vix 1 mm. longis glandulam elongatam vix duplo superantibus.—Quebec: open swampy area, Betchewun, Saguenay County, August 26, 1928, September 3, 1929, *Harrison F. Lewis* (type in Gray Herb.).

Salix simulans, referred to me by Dr. Lewis, when he had only the original collection of 1928, was so perplexing that I encouraged him to secure a second collection in 1929. In its very tomentose and short-pedicelled capsules it would seem to belong in the § *Glaucae,* its aments being very similar to those of the smallest extremes of *S. glauca* L. and of *S. cordifolia* Pursh. In foliage, however, *S. simulans* is as clearly a member of the § *Roseae,* the lower surfaces of the mature leaves often showing the decurrent bases of the elevated lateral nerves (decurrent along the side of the strong midrib) such as are often evident in many of the leaves of *S. myrtilloides* L. of Europe

and its American representatives, *S. pedicellaris* Pursh and *S. hebecarpa* Fernald. In fact, the habit and the foliage of *S. simulans* are so like those of *S. pedicellaris* and the more erect extremes of *S. hebecarpa* that specimens in foliage alone can be separated from them only by minutely pilose young twigs, plumper and pilose axillary buds and pilose young leaves. Although the name *S. hebecarpa* suggests that that species of Gaspé and western Newfoundland has pubescent capsules, it is unfortunately a misnomer. *S. hebecarpa* was originally published as *S. fuscescens*, var. *hebecarpa* and so named because the type material had some pubescence on the capsule, contrasted with the glabrous capsule of the Siberian and Alaskan *S. fuscescens*. The character proves to be not a significant one in *S. hebecarpa* since most specimens have the capsules glabrous or only sparsely pubescent. In *S. hebecarpa* the glabrous or only sparsely pubescent capsules are 6–8 mm. long; in *S. simulans* the densely white-tomentose capsules only 2.5–4 mm. long. From *S. pedicellaris* *S. simulans* is at once distinguished by the pubescent and very short-pedicelled capsules; those of *S. pedicellaris* being large, glabrous and on pedicels several times as long as the nectary.

S. simulans is, likewise, related to *S. athabascensis* Raup, published in this number, but that species has more permanently pubescent and opaque bark of the branches, a permanent pubescence on the leaves and very much larger capsules.

Explanation of Plate 203.

Salix simulans, photographs from type collection: portion of fruiting branch × 1; upper insert, detail of venation, showing decurrent veins × 10; lower insert, capsules and stigmas × 5.

An Alpine Station for Hieracium aurantiacum.—While collecting on Mount Washington during the summer of 1927 I found a cluster of several plants of *Hieracium aurantiacum* L., in blossom on the Lion Head Trail at an elevation of about 5500 feet. The highest station recorded by Pease[1] is 4200 feet on Mount Pleasant more than a thousand feet lower. The group was growing beside the trail in the shelter of a clump of *Abies balsamea* and seemed to be in a thriving condition.—Stuart K. Harris, Boston University.

[1] Pease, A. S. The Vascular Flora of Coös County, New Hampshire, Proc. Boston Soc. Nat. Hist., Vol. 37, No. 3, p. 371. 1924.

TIPULARIA DISCOLOR IN DUKES COUNTY, MASSACHUSETTS

John M. Fogg, Jr.

In the sixth edition of Gray's Manual (1889) the distribution of the Crane-fly Orchis, *Tipularia discolor* (Pursh) Nutt. (*T. unifolia* (Muhl.) BSP.) is given as "sandy woods, Vt. to N. J. and Fla., west to Mich.; very scarce."

The records which may have formed the basis for the inclusion of this species in the flora of Vermont or elsewhere in New England will be considered below; that they were subsequently discredited is evidenced by the fact that in the seventh edition of the Manual (1908) the plant is spoken of as "extending northw. to N. J.; reported but unverified from farther north."

Norman Taylor, in his "Flora of the Vicinity of New York,"[1] in addition to listing eight counties in New Jersey (five of them being from the extreme northern portion of the state) from which *Tipularia* has been reported, records its occurrence "near N. Y. City" and on Staten Island. These two latter localities, although not in New Jersey, still do not extend the range of the plant north of that state, but merely fit in with its distribution as understood in recent years.

Of greater interest is the record, likewise incorporated by Taylor, of the occurrence of this species at Greenport, Long Island, for this extends its known range significantly to the eastward. For our knowledge of the Greenport station we are indebted to Roy Latham, who also discovered the plant at Orient Point, Long Island, and has recently reported the finding of two colonies at Montauk Point, the easternmost extremity of the island.[2]

In view of the rather large number of species common to eastern Long Island and southeastern Massachusetts, it seemed natural to wonder, upon reading Latham's account of the Montauk locality, whether *Tipularia* might not reasonably be expected to belong in this category. The first intimation that such was actually the case came from a remark made by Professor Fernald to the writer to the effect that in the herbarium of the Boston Society of Natural History there was a specimen of this rare orchid collected on Martha's Vine-

[1] Memoirs New York Bot. Gard., v. 259 (1915).

[2] Latham, R. Torreya, xxvii. 51 (1927). True, the species there reported and discussed is *T. uniflora*, but this presumably refers to the plant under present consideration.

yard. A visit to the Boston Society, where, through the kindness of Mr. S. N. F. Sanford, the facilities of the botanical collections were made available, resulted in the discovery of two sheets in the *Tipularia* folder. Inasmuch as these have apparently escaped general notice a few words concerning each of them seem not to be amiss here.

One of the sheets bears a label which reads, "Dry woods on a declivity ½ mile N. of Luce's Tavern, Martha's Vineyard, Chilmark?" At the bottom of the sheet are pencilled the words, "Oakes coll." There is no further indication as to habitat, date or name of collector, although the abbreviation "coll." following Oakes's name may conceivably refer to "collector", rather than to "collection" as one would normally infer.

The other sheet carries a ticket with the inscription, "Herb. Oakes." as a heading. In addition to the name of the plant the only information given on this label is the locality "Martha's Vineyard," which is followed, in pencil, by the word "Chilmark." A printed slip affixed to the bottom of the sheet reads, "Herb. John A. Lowell."

It is entirely possible that these two specimens may represent the same collection or, at least, separate collections from the same locality. And just where that locality may have been is indeed a matter for conjecture. Speculation on this head is invited by the fact that the word "Chilmark" comes at the end of the legend on one of the labels, to be followed by a question mark, while on the other sheet it is written in with pencil, as though doubtfully correct. Was Luce's Tavern actually in Chilmark or was it in some other part of the island, as, for example, West Tisbury?

Unfortunately, the name of Luce is of such ubiquitous occurrence on the Vineyard that it is difficult, perhaps impossible, to answer this question, but there can be no doubt that the long line of wooded morainal hills extending from Menemsha northeast to West Chop offers many a habitat ideally suited to the requirements of this interesting orchid. Further, the contention that *Tipularia* was collected in some portion of Martha's Vineyard other than Chilmark is strengthened by the circumstance that Sydney Harris, whose intensive collecting from the Chilmark region covered a period of fourteen years (from 1891 to 1904) and whose many specimens from there represent important pioneer work in laying the foundations for such knowledge as we possess of the flora of the island, has left us no

record of the plant from an area with which we have every reason to suppose he was intimately familiar.

That *Tipularia* was well known to the earlier botanists from Martha's Vineyard becomes evident upon even a casual inspection of the literature. Oakes himself records the plant "In woods in Martha's Vineyard, Mass., 1829."[1] In Torrey's Flora of the State of New York we find the statement, "Its northern limit, so far as I know, is Martha's Vineyard, where (I believe) it was found by Mr. Oakes."[2] Similar references, augmented by reports of the species from elsewhere in Massachusetts and from Vermont, may be met with in local and state floras during the ensuing years and are summarized in 1884 by Baldwin, who tells us that *T. discolor* "straggles across the sandy woods of Massachusetts into Southern Vermont."[3]

In preparing the present note, which aims merely to emphasize the occurrence of *Tipularia* in Dukes County, no attempt has been made to verify records of the plant from elsewhere in New England. The significant feature of the two herbarium sheets described above is that they constitute vouchers, apparently overlooked by some recent workers, to confirm the occurrence of the Crane-fly Orchis in southeastern Massachusetts.

During the winter of 1927–28 the writer, while pursuing a program of work at the Gray Herbarium, found in the library of that institution a typewritten list of the plants of Nashawena Island compiled by Mrs. Alice R. Northrop. In 1901, and again in 1903, Mrs. Northrop had visited Nashawena, which is one of the Elizabeth Islands in Dukes County, Massachusetts, and the list in question, which so far as is known has never been published, embodies the results of her own observations and contains the names of over three hundred ferns and flowering plants found by her on that island. Interestingly enough, *Tipularia discolor* (*unifolia*) is included in the flora of Nashawena by Mrs. Northrop, with the comment, "quite common in 3 or 4 localities, c. & n. e. part island."

Inasmuch as this list includes the names of several other species remarkable for their occurrence in southeastern New England, the writer at once set about ascertaining whether these records were corroborated by herbarium specimens. It was soon learned that

[1] Wm. Oakes, in Hovey's Mag. vii. 184 (1841).
[2] Torrey, Fl. N. Y. ii. 272 (1843).
[3] Baldwin, Orchids of New England, 90 (1884).

Mrs. Northrop had done a certain amount of collecting and that her specimens had been presented to the New York Botanical Garden. A systematic search through the collections at New York revealed the fact that about one-fifth of the species reported in the "List of Nashawena Plants" are substantiated by herbarium sheets.[1] Fortunately, among this twenty per cent is an excellent specimen of *T. discolor* collected in the summer of 1901. The label bears no information as to the exact location on Nashawena where the plant was found, but the island is not a large one and it is to be expected that future investigations will lead to a discovery of the haunts of this rare orchid.

Here then, is a second station in Dukes County, Massachusetts for a species which may now definitely be restored to the flora of New England. And it is not totally without interest that both of these localities should be from areas which display an affinity with a continental flora rather than with that transplanted element of the flora of the southern coastal plain so characteristic of nearby portions of Barnstable, Dukes and Nantucket Counties.

University of Pennsylvania.

Deam's Grasses of Indiana.[2] No one else is anywhere nearly so well qualified as Mr. Deam to write of the flora of Indiana; it is therefore in the natural course of things (though none the less praiseworthy for that) that his latest publication, a manual of the grasses of the state, is admirably comprehensive and thorough. From the introductory account of the morphology of the grass plant, by Dr. Paul Weatherwax, to the illustrated glossary at the end, no feature is lacking which such a work should have. There are carefully worked out keys; nearly every species has an original, detailed description drawn up from Indiana material; and at least a spikelet of every one is illustrated. The drawings—with one exception, by Dr. Weatherwax—are painstaking and essentially accurate throughout. Perhaps, in some cases, they are a bit conventionalized in the rendering of certain details—witness the difference in the pubescence of the spikelet as drawn in plate 75 and in Mrs. Chase's exquisitely finished little figure of the same thing on the following page.[3]

[1] A detailed account of the results of this research is incorporated in an extended survey of the Flora of the Elizabeth Islands soon to appear in Rhodora.

[2] Deam, Charles C. Grasses of Indiana. Indiana Dept. of Conservation, Pub. 82. 256 pp., 86 pls., numerous maps and text figures. Indianapolis, Oct. 15, 1929.

[3] One is conscious of a wistful desire that the difference in shape shown in the plates between the first glume of *Panicum huachucae* and *P. tennesseense* and of other members of their group were constant; but sad experience (as well as Hitchcock & Chase's lack of emphasis on this character) teaches that it is not.

The nomenclature follows the International Rules, with one or two of the small slips which none of us wholly escape in this technical matter. Under the Rules, *Muhlenbergia umbrosa* Scribn. and *Panicum stipitatum* Nash are superfluous names; *M. sylvatica* Torr. and *P. elongatum* Pursh may be, and should be, used.[1] Modest as always, Mr. Deam makes no attempt at taxonomic originality; here, he follows for the most part Hitchcock and Chase, but is prompt in taking into account all work bearing on his region. Originality in plenty, and of the best kind, may be found elsewhere—for instance in the full notes on the habitat, associates, etc. of each species, drawn from Mr. Deam's rich knowledge of the local flora and his years of experience in the field. These are of more than local interest; so, too, is the one new species described, *Panicum Deamii* Hitchc. & Chase. A near relative of the Atlantic *P. Commonsianum*, it adds one more to the list of plants of coastal plain affinity found about the southern end of Lake Michigan. And the maps of distribution within Indiana which accompany each species call for more than passing mention. They are made large enough to admit of placing in each county, not the usual dots or crosses, but one or more letters, indicating not only occurrence, but also the herbaria where the specimens are to be found on which the records for the county are based. It is hard to imagine a more exact, succinct, and comprehensive method of conveying phytogeographical information.

Altogether, "Grasses of Indiana" is a model of its kind; it should take its place on the little shelf of classical local floras to which one turns with confidence for exact data as to the regions covered.—C. A. Weatherby.

[1] *Agrostis sylvatica* Torr. is validated (or, as Mr. Sprague would say, legitimatized) by transfer to *Muhlenbergia;* for *Panicum elongatum* see Rhodora xxxi. 108 (1929).

Volume 32, no. 377, including pages 99 to 102 and plates 199 to 201, was issued 7 May, 1930.

Photo. by H. M. Raup.

SALIX ATHABASCENSIS

(Branch at right × ½, at left × 1¾)

Photo. by H. M. Raup.

SALIX SIMULANS

(Branch × 1, Venation × 10, Capsules × 5)

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